[0175] Next, the display light control means 23 converts the character data stored in the character storage means 42 to pixel data, which is changed to bit data for the displaying by adding the position data. And the data is sent to the display driver 122 comprising the electronic paper 101.

[0176] Besides, the pixel data consists of color data and density data corresponding to each pixel composing the display unit 121. The position data is expressed by the address of each pixel composing the display unit 121, for example, by the x coordinate (L1: a raw wiring) and the y coordinate (L2: a column wiring).

[0177] At receiving the display-bit-data, the display driver 122 recognizes the pixel information of the display-bit-data and the position of the pixel by decoding the pixel data and the position data from the display-bit-data. Subsequently the display driver 122 outputs the voltage corresponding to the decoded pixel data to respective raw wiring L2 and the column wiring L1 corresponding to the decoded pixel data, and displays the character data on the specific position of the display unit 121.

[0178] Likewise, the display light control means 23 converts the image data stored in the image storage means 43 to the pixel data and adding the position data to said data. By sending the data to the display driver 122 comprising the electronic paper 101, the image data is displayed as well as the character data.

[0179] If the display driver part 12 of the electronic paper 101 is provided with the character storage means 42 and the image storage means 43 as described above, even when the electronic paper is detached form the cover 102, it is possible to manage the character data and the image data on the electronic paper 101 independently. However, the character storage means 42 and the image storage means 43 is not always necessary to be provided on the electronic paper 101, but may be provided on the cover 102. In addition, the inputting (editing) to the character storage 42 and the image storage 43 should be reflected on the memory card 41, thereby the object display-data could be edited.

[0180] In the next place, the following explains about the inputting (editing) of the character data and the image data on the electronic paper.

[0181] In order to edit the content displayed on the electronic paper 101, a transmissive sheet 44 can be used as shown in FIG. 30. The transmissive sheet 44 is the coordinate detecting means adopting the electromagnetic induction type or the electrostatic coupling type used by a tablet, a digitizer, or a touch panel.

[0182] That is to say, the electronic paper 101 shown in FIG. 30 is provided with the transmissive sheet 44 including the digitizer function (that is to say, the transmissive sheet 44 offers a function capable of detecting the position touched by a writing material) on a surface of the display unit 121. Thereby, when the user illustrates his desired characters or pictures on the transmissive sheet 44 by the writing material (such as a pen like a sharp pointed thing), the transmissive sheet 44 detects the contact point of the writing material and the transmissive sheet 44, and the position is sent to the display light control means 23.

[0183] However, if it is possible to specify the position like the above, it is not always necessary to use the digitizer

function. For instance, specifying the position by using a pointing device like a mouse can obtain the same effect.

[0184] The display light control means 23 updates the image data stored in the image storage means 43 on the basis of the color data and the density data corresponding to the editing content and the position data of pixel corresponding to the position of contact point. Besides, the editing content in the embodiment is that of colors, density, expressing method, and etc. that were predetermined by the user to write in, (the expressing method is to image those written by a brush or a pen).

[0185] The processing after that is the same as the case where the image data is received from the sending-receiving means 104.

[0186] According to the input processing as above, it is possible to update the image data stored in the image storage means 43 and the displaying on the display unit 121.

[0187] When the character data is inputted, the user has to specify the position to input previously by using the writing material. The position specified in this way is sent to the display light control means 23 from the transmissive sheet 44 as mentioned above.

[0188] Next, when the user inputs a specific character by using a software keyboard or a keyboard connected separately, the display light control means 23 receives this inputted data as the character data. The received character data is inserted to the character data stored in the character storage means 42 according to the information of position specified as above.

[0189] After that, in the same way of the case that the image data is received from the sending-receiving means 104, the displaying of the electronic paper 101 is updated. Besides, the processing to reflect the image data and the character data on each storage means is the control of storage means, and has nothing to do with the invention, therefore the detailed explanation is omitted here.

[0190] Accordingly, it is possible to edit directly the display content on the electronic paper. Additionally, since the character storage and the image storage are provided on the electronic paper, even when the electronic paper 101 is detached from the cover, it is possible to retain the character data and the image data as the independent electronic data.

[0191] Referring to FIG. 25, FIG. 26(a) and FIG. 26(b), the deletion (editing) of the character data and the image data on the electronic paper 101 is explained.

[0192] FIG. 26(a) shows the electronic paper file 100 simply. The electronic paper file is provided with three electronic papers 54 to 56. The electronic papers 54 to 56 offers the same function as the electronic paper 101 shown in FIG. 25. It is arranged that each electronic paper 54 to 56 is provided with respective character storage means 54-2, 55-2, and 56-2 and image storage means 54-3, 55-3, and 56-3, and the character data and the image data corresponding to consecutive pages are displayed on respective display unit. FIG. 26(b) shows an image of inside of the character storage means 55-2.

[0193] In case where the user deletes the character data, he first specifies an area 60 including the character data as described hereafter. When the area 60 is specified on the